

C.O.C. # 172  
**CHAIN OF CUSTODY REPORT**

Work Order #: **P160583**

CLIENT: <b>Bristol</b>		INVOICE TO: <b>Bristol</b>		<b>TURNAROUND REQUEST in Business Days*</b> Organic & Inorganic Analyses <div style="display: flex; justify-content: space-around;"> <div>10 7 5 4 3 2 1 &lt;1</div> <div>STD. 5 4 3 2 1 &lt;1</div> </div> STD. <span style="border: 1px solid black; padding: 2px;">OTHER</span> Please Specify _____ <small>*Turnaround Requests less than standard may incur Rush Charges.</small>			
REPORT TO: <b>Anne Kuana we Hez</b>		P.O. NUMBER: <b>21090</b>					
ADDRESS: <b>Amlchitka Island, AK</b>							
PHONE: <b>907 770-0974</b> FAX: <b>770-0975</b>							
PROJECT NAME: <b>Amlchitka</b>		REQUESTED ANALYSES					
PROJECT NUMBER: <b>21090</b>							
SAMPLED BY: <b>Cum/ATV</b>							
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PATS ENT 5270 Sims					
1. <b>01AMF1308SL</b>	<b>7/14/01 1020</b>	<b>X</b>					
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
RELINQUISHED BY: <b>Charlie Marshall</b>		DATE: <b>7/14/01</b>		RECEIVED BY: <b>Steph L. Loo</b>		DATE: <b>7/14/01</b>	
PRINT NAME: <b>Charlie Marshall</b>		FIRM: <b>Bristol</b>		PRINT NAME: <b>Steph L. Loo</b>		FIRM: <b>NCA</b>	
RELINQUISHED BY: <b>Steph L. Loo</b>		DATE: <b>7/15/01</b>		RECEIVED BY: <b>Sarah Passargu</b>		DATE: <b>7/18/01</b>	
PRINT NAME: <b>Steph L. Loo</b>		FIRM: <b>NCA</b>		PRINT NAME: <b>Sarah Passargu</b>		FIRM: <b>NCA</b>	
ADDITIONAL REMARKS:						TEMP: <b>1.2</b>	PAGE 1 OF 1



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
425.420.1111 fax 425.420.9210  
**Spokane** East 11115 W. Montgomery, Suite B, Spokane, WA 99206-4776  
509.924.9200 fax 509.924.9290  
**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
503.906.9200 fax 503.906.9210  
**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
541.383.9310 fax 541.382.7588

7 November, 2001

Steve Johnson  
Bristol Environmental & Engineering  
2000 W. International Airport Rd. #C-1  
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are **amended** results of analyses for samples received by the laboratory on 07/18/01 09:30. If you have any questions concerning this report, please feel free to contact me. These results supercede all previous results reported by the laboratory.

Sincerely,

Jerry Orlando  
Project Manager/QA

Work Orders included in this report:

**P1G0583**



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Bristol Environmental & Engineering  
2000 W. International Airport Rd. #C-1  
Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 210901, PO# 21090  
Project Manager: Steve Johnson

**Amended Report**  
Issued: 11/07/01 12:01

**ANALYTICAL REPORT FOR SAMPLES - Amended**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMF1308SL	P1G0583-01	Soil	07/14/01 10:20	07/18/01 09:30

North Creek Analytical - Portland

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

  
Jerry Orlando, Project Manager/QA

**North Creek Analytical, Inc.**  
**Environmental Laboratory Network**

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Bristol Environmental & Engineering  
 2000 W. International Airport Rd. #C-1  
 Anchorage, AK 99502-1116

Project: Amchitka  
 Project Number: 210901, PO# 21090  
 Project Manager: Steve Johnson


**Amended Report**  
 Issued: 11/07/01 12:01

**Polynuclear Aromatic Compounds per EPA 8270M-SIM**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>01AMF1308SL (P1G0583-01) Soil</b>						Sampled: 07/14/01 Received: 07/18/01			
Acenaphthene	ND	670	ug/kg dry	50	EPA 8270m	07/23/01	07/27/01	1071566	R-03
Acenaphthylene	ND	670	"	"	"	"	"	"	R-03
Anthracene	ND	670	"	"	"	"	"	"	R-03
Benzo (a) anthracene	ND	13.4	"	1	"	"	07/27/01	"	
Benzo (a) pyrene	ND	13.4	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	13.4	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	13.4	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	13.4	"	"	"	"	"	"	
Chrysene	ND	13.4	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	13.4	"	"	"	"	"	"	
Fluoranthene	ND	670	"	50	"	"	07/27/01	"	R-03
Fluorene	ND	670	"	"	"	"	"	"	R-03
Indeno (1,2,3-cd) pyrene	ND	13.4	"	1	"	"	07/27/01	"	
Naphthalene	ND	670	"	50	"	"	07/27/01	"	R-03
Phenanthrene	ND	670	"	"	"	"	"	"	R-03
<b>Pyrene</b>	<b>56.5</b>	<b>13.4</b>	"	<b>1</b>	"	"	<b>07/27/01</b>	"	
Surr: Fluorene-d10	NR	40-150							S-01
Surr: Pyrene-d10	132 %	40-150							
Surr: Benzo (a) pyrene-d12	94.3 %	40-150							

North Creek Analytical - Portland

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 Jerry Orlando, Project Manager/QA

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Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 210901, PO# 21090  
Project Manager: Steve Johnson


**Amended Report**  
Issued: 11/07/01 12:01

**Percent Dry Weight (Solids) per Standard Methods**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMF1308SL (P1G0583-01) Soil					Sampled: 07/14/01 Received: 07/18/01				
% Solids	82.4	1.00	% by Weight	1	NCA SOP	07/20/01	07/21/01	1071477	

North Creek Analytical - Portland

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Project: Amchitka  
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**Amended Report**  
Issued: 11/07/01 12:01

**Polynuclear Aromatic Compounds per EPA 8270M-SIM - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1071566 - EPA 3550**

**Blank (1071566-BLK1)**

Prepared: 07/23/01 Analyzed: 07/25/01

Acenaphthene	ND	13.4	ug/kg							
Acenaphthylene	ND	13.4	"							
Anthracene	ND	13.4	"							
Benzo (a) anthracene	ND	13.4	"							
Benzo (a) pyrene	ND	13.4	"							
Benzo (b) fluoranthene	ND	13.4	"							
Benzo (ghi) perylene	ND	13.4	"							
Benzo (k) fluoranthene	ND	13.4	"							
Chrysene	ND	13.4	"							
Dibenzo (a,h) anthracene	ND	13.4	"							
Fluoranthene	ND	13.4	"							
Fluorene	ND	13.4	"							
Indeno (1,2,3-cd) pyrene	ND	13.4	"							
Naphthalene	ND	13.4	"							
Phenanthrene	ND	13.4	"							
Pyrene	ND	13.4	"							
Surr: Fluorene-d10	62.5		"	83.3		75.0	40-150			
Surr: Pyrene-d10	83.9		"	83.3		101	40-150			
Surr: Benzo (a) pyrene-d12	75.5		"	83.3		90.6	40-150			


**LCS (1071566-BS1)**

Prepared: 07/23/01 Analyzed: 07/25/01

Acenaphthene	137	13.4	ug/kg	167		82.0	33-139			
Benzo (a) pyrene	156	13.4	"	167		93.4	45-149			
Pyrene	148	13.4	"	167		88.6	39-138			
Surr: Fluorene-d10	67.1		"	83.3		80.6	40-150			
Surr: Pyrene-d10	89.5		"	83.3		107	40-150			
Surr: Benzo (a) pyrene-d12	80.3		"	83.3		96.4	40-150			

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Project: Amchitka  
 Project Number: 210901, PO# 21090  
 Project Manager: Steve Johnson

**Amended Report**  
 Issued: 11/07/01 12:01

**Polynuclear Aromatic Compounds per EPA 8270M-SIM - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1071566 - EPA 3550**

**Matrix Spike (1071566-MS1)**

Source: P1G0534-01

Prepared: 07/23/01 Analyzed: 07/26/01

Acenaphthene	147	13.4	ug/kg dry	189	ND	72.9	33-139		
Benzo (a) pyrene	165	13.4	"	189	34.1	69.3	45-149		
Pyrene	181	13.4	"	189	91.4	47.4	39-138		
Surr: Fluorene-d10	69.3		"	94.6		73.3	40-150		
Surr: Pyrene-d10	100		"	94.6		106	40-150		
Surr: Benzo (a) pyrene-d12	85.4		"	94.5		90.4	40-150		

**Matrix Spike Dup (1071566-MSD1)**

Source: P1G0534-01

Prepared: 07/23/01 Analyzed: 07/26/01

Acenaphthene	151	13.4	ug/kg dry	189	ND	75.0	33-139	2.68	60
Benzo (a) pyrene	166	13.4	"	189	34.1	69.8	45-149	0.604	60
Pyrene	179	13.4	"	189	91.4	46.3	39-138	1.11	60
Surr: Fluorene-d10	76.4		"	94.6		80.8	40-150		
Surr: Pyrene-d10	99.4		"	94.6		105	40-150		
Surr: Benzo (a) pyrene-d12	86.9		"	94.5		92.0	40-150		

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**Amended Report**  
 Issued: 11/07/01 12:01

### Percent Dry Weight (Solids) per Standard Methods - Quality Control

#### North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1071477 - Dry Weight</b>										
<b>Duplicate (1071477-DUP1)</b>	<b>Source: P1G0377-13 Prepared: 07/20/01 Analyzed: 07/21/01</b>									
% Solids	72.6	1.00 % by Weight			73.6			1.37	20	
<b>Duplicate (1071477-DUP2)</b>	<b>Source: P1G0377-11 Prepared: 07/20/01 Analyzed: 07/21/01</b>									
% Solids	73.5	1.00 % by Weight			73.5			0.00	20	
<b>Duplicate (1071477-DUP3)</b>	<b>Source: P1G0377-12 Prepared: 07/20/01 Analyzed: 07/21/01</b>									
% Solids	80.2	1.00 % by Weight			81.5			1.61	20	
<b>Duplicate (1071477-DUP4)</b>	<b>Source: P1G0685-01 Prepared: 07/20/01 Analyzed: 07/21/01</b>									
% Solids	81.4	1.00 % by Weight			83.5			2.55	20	

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Project: Amchitka  
Project Number: 210901, PO# 21090  
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
**Amended Report**  
Issued: 11/07/01 12:01

### Notes and Definitions

- R-03 The reporting limit for this analyte was raised due to matrix interference.
- S-01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interferences.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

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